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| | | |
|---|---|---|
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| NEWS 3 | AUG 06 | FSTA enhanced with new thesaurus edition |
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| NEWS 6 | AUG 27 | Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB |
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| NEWS 12 | SEP 17 | CA/CAplus enhanced with printed CA page images from 1967-1998 |
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| NEWS 16 | OCT 19 | BEILSTEIN updated with new compounds |
| NEWS 17 | NOV 15 | Derwent Indian patent publication number format enhanced |
| NEWS 18 | NOV 19 | WPIX enhanced with XML display format |
| NEWS 19 | NOV 30 | ICSD reloaded with enhancements |
| NEWS 20 | DEC 04 | LINPADOCDB now available on STN |
| NEWS 21 | DEC 14 | BEILSTEIN pricing structure to change |
| NEWS 22 | DEC 17 | USPATOLD added to additional database clusters |
| NEWS 23 | DEC 17 | IMSDRUGCONF removed from database clusters and STN |
| NEWS 24 | DEC 17 | DGENE now includes more than 10 million sequences |
| NEWS 25 | DEC 17 | TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment |
| NEWS 26 | DEC 17 | MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary |
| NEWS 27 | DEC 17 | CA/CAplus enhanced with new custom IPC display formats |
| NEWS 28 | DEC 17 | STN Viewer enhanced with full-text patent content from USPATOLD |
| NEWS 29 | JAN 02 | STN pricing information for 2008 now available |
| NEWS 30 | JAN 16 | CAS patent coverage enhanced to include exemplified prophetic substances |
| NEWS 31 | JAN 28 | USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats |

NEWS 32 JAN 28 MARPAT searching enhanced
NEWS 33 JAN 28 USGENE timeliness enhanced
NEWS 34 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008

=> file caplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 1.26 | 1.26 |

FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
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FILE COVERS 1907 - 29 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 28 Jan 2008 (20080128/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s polyol (L) diol (L) trioil (L) triglycerides
40393 POLYOL
30859 POLYOLS

```
          55190 POLYOL
                  (POLYOL OR POLYOLS)
          80509 DIOL
          24921 DIOLS
          94491 DIOL
                  (DIOL OR DIOLS)
              1 TRIOIL
          41925 TRIGLYCERIDES
L1            0 POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES

=> s polyol (L) triglyceride
          40393 POLYOL
          30859 POLYOLS
          55190 POLYOL
                  (POLYOL OR POLYOLS)
          44902 TRIGLYCERIDE
          41925 TRIGLYCERIDES
          72350 TRIGLYCERIDE
                  (TRIGLYCERIDE OR TRIGLYCERIDES)
L2          240 POLYOL (L) TRIGLYCERIDE

=> s l2 and polyurethane
         131009 POLYURETHANE
         104340 POLYURETHANES
         161790 POLYURETHANE
                  (POLYURETHANE OR POLYURETHANES)
L3           45 L2 AND POLYURETHANE

=> s l3 and seed
         159358 SEED
         101766 SEEDS
         208295 SEED
                  (SEED OR SEEDS)
L4            4 L3 AND SEED

=> d l4 1-4 ibib abs

L4   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:913854  CAPLUS
TITLE:                    Producing polyurethane foam from natural oil
AUTHOR(S):                Sanders, Aaron; Babb, David; Prange, Robbyn;
                          Sonnenschein, Mark; Delk, Van; Derstine, Chris; Olson,
                          Kurt
CORPORATE SOURCE:         The Dow Chemical Company, Freeport, TX, 77541, USA
SOURCE:                   Chemical Industries (Boca Raton, FL, United States)
                          (2007), 115(Catalysis of Organic Reactions), 377-384
                          CODEN: CHEIDI; ISSN: 0737-8025
PUBLISHER:                CRC Press LLC
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   As part of the effort to reduce our dependence on fossil fuels, The Dow
     Chemical Company has been developing a seed oil based
     polyol to be used as a replacement to conventional petrochem.
     based polyether polyols in the production of flexible
     polyurethane foam.  The general process for making natural oil
     polyols consists of four steps.  In the first step, a vegetable
     oil (triglyceride) is transesterified with methanol, liberating
     glycerin, and forming fatty acid Me esters or FAMEs.  In the second step
```

the FAMEs are hydroformylated giving a complex mixture of FAMEs that contain 0-3 formyl groups per chain. In the third step, the aldehydes and the remaining unsaturates are hydrogenated to yield a mixture of FAMEs that contain 0-3 hydroxymethyl groups. Finally, the poly(hydroxymethyl)fatty esters are transesterified onto a suitable initiator to produce the natural oil polyol.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:265371 CAPLUS
DOCUMENT NUMBER: 134:281258
TITLE: Preparation of transesterification polyols for polyurethane-prepolymers with specifically regulated viscosity
INVENTOR(S): Thiele, Lothar; Zander, Lars; Klein, Johann; Beuer, Bernd; Knips, Nicole; Doebrich, Peter .
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001025184 | A1 | 20010412 | WO 2000-EP9312 | 20000923 |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19947563 | A1 | 20010419 | DE 1999-19947563 | 19991002 |
| EP 1218332 | A1 | 20020703 | EP 2000-967760 | 20000923 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| JP 2003511486 | T | 20030325 | JP 2001-528132 | 20000923 |
| PRIORITY APPLN. INFO.: | | | DE 1999-19947563 A | 19991002 |
| | | | WO 2000-EP9312 W | 20000923 |

AB Transesterification polyols, useful as polyols for producing polyurethane prepolymers, are produced by the transesterification of castor oil with natural triglycerides (e.g., rape seed oil) that are free of OH-groups in the presence of Group IA or IIA metal hydroxide catalysts (e.g., lithium hydroxide). Transesterification polyols of this type with polyisocyanates also have a low, constant viscosity in the form of solvent-free or water-free compns. and are suitable for producing single or multiple component adhesives, sealants, casting compds. or coating agents.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:79499 CAPLUS
DOCUMENT NUMBER: 120:79499
TITLE: Investigation of urethane oils based on Ecballium elaterium and P. mahaleb seed oils
AUTHOR(S): Erciyes, A. T.; Erkal, F. S.; Kabasakal, O. S.
CORPORATE SOURCE: Fac. Chim. Metall., Istanbul Tech. Univ., Maslak, 80626, Turk.

SOURCE: Pitture e Vernici Europe (1993), 69(5), 17-22
CODEN: PVEUEO
DOCUMENT TYPE: Journal
LANGUAGE: English/Italian
AB Ecabellium elaterium and P. mahaleb seed oils were used in the preparation of urethane oil. Urethane oils are prepared by reacting a diisocyanate with the partial esters obtained from triglyceride oil. Consequently, urethane oils can be considered as an alkyd resin in which the phthalic anhydride is replaced by a diisocyanate. Film properties of these materials are dependent on the oil, polyol, and diisocyanate used in the formulation. Since Ecballium elaterium and P. mahaleb seed oils contain punicic and α-elecsteric acids, resp., which are conjugated trienoic acids, the use of these oils as an oil component in the urethane oils is worth investigating. Although these oils contain conjugated double bonds, no gelation occurred during the process.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:111497 CAPLUS
DOCUMENT NUMBER: 104:111497
ORIGINAL REFERENCE NO.: 104:17671a,17674a
TITLE: Polyol compositions
INVENTOR(S): Kusakawa, Tsutomu; Ito, Yoshiyuki
PATENT ASSIGNEE(S): Itoh Oil Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 60177013 | A | 19850911 | JP 1984-32980 | 19840222 |
| JP 03070731 | B | 19911108 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-32980 | 19840222 |

AB Polyol compns. for 2-liquid polyurethane coatings are prepared by reaction of 1 mol triglycerides comprising 10-100% natural oils and fats with no OH groups and 0-90% castor oil, 0.1-2 mol alcs. containing tertiary N, and 0-1.9 mol low-mol.-weight polyols. The sum of the last 2 components are <2 mols. Thus, castor oil and rape seed oil were heated with Quadrol, then mixed with Takelac U-27 (polyester polyol) and Coronate L, and cured to form a coating.

=> d his

(FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
L1 0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2 240 S POLYOL (L) TRIGLYCERIDE
L3 45 S L2 AND POLYURETHANE
L4 4 S L3 AND SEED

=> s l3 not l4
L5 41 L3 NOT L4

```
=> s l5 and diol
         80509 DIOL
         24921 DIOLS
         94491 DIOL
                 (DIOL OR DIOLS)
L6           3 L5 AND DIOL

=> d l6 1-3 ibib abs
```

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1207938 CAPLUS
DOCUMENT NUMBER: 147:450033
TITLE: Fire-resistant antisoiling curable compositions and low-hardness urethane rubbers and gels comprising them
INVENTOR(S): Sato, Eisaku; Yasue, Masao
PATENT ASSIGNEE(S): Inoac Corp., Japan; Inoac Technical Center Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 13pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2007277390 | A | 20071025 | JP 2006-105117 | 20060406 |
| PRIORITY APPLN. INFO.: | | | JP 2006-105117 | 20060406 |

AB The compns. contain (A) OH-containing long-chain fatty acid-derived compds. with Mn ≥600 having 1.9-2.0 hydroxy groups per mol., (B) isocyanates or their diol derivs. having 2.0-3.0 NCO per mol., and (C) long-chain fatty acid glycerides, whose residual OH in glycerin parts and on carbon chains are modified. Thus, a composition comprising castor oil-based polyester polyol 60, acetylated ricinoleic acid triglyceride 40, dibutyltin dilaurate 0.1, and MDI-terminated prepolymer having polyoxypropylene chain 103 parts was sandwiched by PET films and cured to give a test piece showing C hardness (JIS K 7312) 10, UL-94 fire-resistant rating V-0, and no bleeding after storing under 70° and 7 kPa-load for 24 h nor deformation after storing at 80° for 24 h.

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:246921 CAPLUS
DOCUMENT NUMBER: 140:292678
TITLE: Bone adhesives with improved biodegradation composed of polyol-containing polyester-polyurethane
INVENTOR(S): Siedentop, Tjark; Klein, Joachim; Uhr, Guenter
PATENT ASSIGNEE(S): Curasan AG, Germany; Franz-Patat-Zentrum Wissenschaftliches Forum fuer Interdisziplinaere Polymerforschung E.V.
SOURCE: Ger. Offen., 49 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| DE 10242075 | A1 | 20040325 | DE 2002-10242075 | 20020911 |
| DE 10242075 | B4 | 20070201 | | |
| PRIORITY APPLN. INFO.: | | | DE 2002-10242075 | 20020911 |

AB The invention concerns bone adhesives that are composed of polyol -containing polyester-polyurethane; the polyester includes a triglyceride structure allowing for ester hydrolysis and an improved degradation in the body. The bone adhesive compns. include at least one polyurethane, a polyol-containing polyester, a catalyst, phosphates, calcium salts, amino acids and other components, e.g. dextran, glucose. Thus a composition contained: Merginat PV 235 1.1 mL; Luprinat M20W 0.6 mL; hexamethylene diisocyanate 0.25 mL; glycerin phosphate calcium salt 0.3 g. Upon application 2-ethylhexanoic acid zinc salt was added at a ratio of polyesterpolyol component:catalyst - 150: 1.

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:335490 CAPLUS
DOCUMENT NUMBER: 132:335908
TITLE: Aqueous dispersions of uralkyd resins and their manufacture for coating wood
INVENTOR(S): Damery, Shawn; Coogan, Richard George
PATENT ASSIGNEE(S): Avecia Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000027938 | A1 | 20000518 | WO 1999-US23995 | 19991102 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1129147 | A1 | 20010905 | EP 1999-971831 | 19991102 |
| EP 1129147 | B1 | 20030409 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AT 236962 | T | 20030415 | AT 1999-971831 | 19991102 |
| ES 2193786 | T3 | 20031101 | ES 1999-971831 | 19991102 |
| US 6548588 | B1 | 20030415 | US 2001-807207 | 20010529 |
| PRIORITY APPLN. INFO.: | | | GB 1998-24352 A | 19981106 |
| | | | GB 1998-24353 A | 19981106 |
| | | | WO 1999-US23995 W | 19991102 |

AB Water-dispersible, air-drying uralkyd resins, aqueous dispersions and compns. optionally containing vinyl polymer(s), form coatings, where the uralkyd resin comprises 5-75% amide ester diol product obtained from the reaction of a triglyceride oil and an N,N-dialkanolamine, 1-10% pendant and/or terminal polyethylene oxide chains, carboxylate groups in the form of carboxylic acid-bearing polyols, 15-50% polyisocyanates, and 0-50% other polyols, and where the acid value of the uralkyd resin is 5-30 mg KOH/g resin. Thus, amide ester

diol (adduct of diethanolamine with soya fatty acids oil) 116.3, methoxy polyethylene oxide 20.3, TDI 118.3, 2,2-dimethylolpropionic acid 18, cyclohexanedimethanol 12.8 g, and N-methylpyrrolidone 74 g was heated to give a uralkyd resin, the resin was diluted with cosolvent and water, drier salt, and neutralized with dimethylethanolamine to give a dispersion having a viscosity 2400 cP and solids content 30.2%. Pine wood boards were treated with the above coating composition and dried to give good gloss and gloss retention 87% (after exposure to 90 min dry and 30 min wet at 60°).

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d his

     (FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

     FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
L1            0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2          240 S POLYOL (L) TRIGLYCERIDE
L3           45 S L2 AND POLYURETHANE
L4            4 S L3 AND SEED
L5           41 S L3 NOT L4
L6            3 S L5 AND DIOL

=> s l5 not l6
L7           38 L5 NOT L6

=> s l7 and triol
          13933 TRIOL
           2742 TRIOLS
          15370 TRIOL
                (TRIOL OR TRIOLS)
L8            1 L7 AND TRIOL

=> d 18 1 ibib abs

L8   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:1147436  CAPLUS
DOCUMENT NUMBER:          145:454434
TITLE:                    Polyurethane-coated granular fertilizers
INVENTOR(S):              Takebayashi, Yoshihiro
PATENT ASSIGNEE(S):       Sumitomo Chemical Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 10pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     --------------       ----   --------    --------------------    --------
     JP 2006298673         A     20061102    JP 2005-119371          20050418
PRIORITY APPLN. INFO.:                       JP 2005-119371          20050418
AB   Granular fertilizers coated with a polyurethane resin of the
     invention are superior with respect to suppression of the initial release
     of fertilizer components. The resin is obtained by reacting isocyanate
     with polyol 1 with a ratio of the number of C atoms to O atoms of
```

≤3.0 and polyol 2 with a C/O atomic ratio ≥5.0. The ratio [weight of polyol 1 + OH value of polyol 1]/[weight of polyol 2 + OH value of polyol 2] ranges 2.4-6.0. Thus, urea granules that were coated with polyurethane obtained with polymethylene polyphenyl polyisocyanate, propylene oxide adducts with C3-6 triols, and ricinoleic acid triglyceride had a dissoln. rate of ≤10.0% after 40 days at 25° in distilled water.

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=> d his

     (FILE 'HOME' ENTERED AT 08:54:46 ON 29 JAN 2008)

     FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
L1            0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2          240 S POLYOL (L) TRIGLYCERIDE
L3           45 S L2 AND POLYURETHANE
L4            4 S L3 AND SEED
L5           41 S L3 NOT L4
L6            3 S L5 AND DIOL
L7           38 S L5 NOT L6
L8            1 S L7 AND TRIOL

=> s  l3 and hydroformylation
          7521 HYDROFORMYLATION
           113 HYDROFORMYLATIONS
          7538 HYDROFORMYLATION
                 (HYDROFORMYLATION OR HYDROFORMYLATIONS)
L9            3 L3 AND HYDROFORMYLATION

=> s l4 not l9
L10           4 L4 NOT L9

=> d l10 1-4 ibib abs

L10  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2007:913854  CAPLUS
TITLE:                   Producing polyurethane foam from natural oil
AUTHOR(S):               Sanders, Aaron; Babb, David; Prange, Robbyn;
                         Sonnenschein, Mark; Delk, Van; Derstine, Chris; Olson,
                         Kurt
CORPORATE SOURCE:        The Dow Chemical Company, Freeport, TX, 77541, USA
SOURCE:                  Chemical Industries (Boca Raton, FL, United States)
                         (2007), 115(Catalysis of Organic Reactions), 377-384
                         CODEN: CHEIDI; ISSN: 0737-8025
PUBLISHER:               CRC Press LLC
DOCUMENT TYPE:           Journal
LANGUAGE:                English
```

AB As part of the effort to reduce our dependence on fossil fuels, The Dow Chemical Company has been developing a seed oil based polyol to be used as a replacement to conventional petrochem. based polyether polyols in the production of flexible polyurethane foam. The general process for making natural oil polyols consists of four steps. In the first step, a vegetable oil (triglyceride) is transesterified with methanol, liberating glycerin, and forming fatty acid Me esters or FAMEs. In the second step the FAMEs are hydroformylated giving a complex mixture of FAMEs that contain

0-3 formyl groups per chain. In the third step, the aldehydes and the remaining unsaturates are hydrogenated to yield a mixture of FAMEs that contain 0-3 hydroxymethyl groups. Finally, the poly(hydroxymethyl)fatty esters are transesterified onto a suitable initiator to produce the natural oil polyol.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:265371 CAPLUS
DOCUMENT NUMBER: 134:281258
TITLE: Preparation of transesterification polyols for polyurethane-prepolymers with specifically regulated viscosity
INVENTOR(S): Thiele, Lothar; Zander, Lars; Klein, Johann; Beuer, Bernd; Knips, Nicole; Doebrich, Peter
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001025184 | A1 | 20010412 | WO 2000-EP9312 | 20000923 |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19947563 | A1 | 20010419 | DE 1999-19947563 | 19991002 |
| EP 1218332 | A1 | 20020703 | EP 2000-967760 | 20000923 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| JP 2003511486 | T | 20030325 | JP 2001-528132 | 20000923 |
| PRIORITY APPLN. INFO.: | | | DE 1999-19947563 A | 19991002 |
| | | | WO 2000-EP9312 W | 20000923 |

AB Transesterification polyols, useful as polyols for producing polyurethane prepolymers, are produced by the transesterification of castor oil with natural triglycerides (e.g., rape seed oil) that are free of OH-groups in the presence of Group IA or IIA metal hydroxide catalysts (e.g., lithium hydroxide). Transesterification polyols of this type with polyisocyanates also have a low, constant viscosity in the form of solvent-free or water-free compns. and are suitable for producing single or multiple component adhesives, sealants, casting compds. or coating agents.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:79499 CAPLUS
DOCUMENT NUMBER: 120:79499
TITLE: Investigation of urethane oils based on Ecballium elaterium and P. mahaleb seed oils
AUTHOR(S): Erciyes, A. T.; Erkal, F. S.; Kabasakal, O. S.
CORPORATE SOURCE: Fac. Chim. Metall., Istanbul Tech. Univ., Maslak, 80626, Turk.
SOURCE: Pitture e Vernici Europe (1993), 69(5), 17-22

CODEN: PVEUEO
DOCUMENT TYPE: Journal
LANGUAGE: English/Italian
AB Ecabellium elaterium and P. mahaleb seed oils were used in the preparation of urethane oil. Urethane oils are prepared by reacting a diisocyanate with the partial esters obtained from triglyceride oil. Consequently, urethane oils can be considered as an alkyd resin in which the phthalic anhydride is replaced by a diisocyanate. Film properties of these materials are dependent on the oil, polyol, and diisocyanate used in the formulation. Since Ecballium elaterium and P. mahaleb seed oils contain punicic and α-elecsteric acids, resp., which are conjugated trienoic acids, the use of these oils as an oil component in the urethane oils is worth investigating. Although these oils contain conjugated double bonds, no gelation occurred during the process.

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1986:111497 CAPLUS
DOCUMENT NUMBER: 104:111497
ORIGINAL REFERENCE NO.: 104:17671a,17674a
TITLE: Polyol compositions
INVENTOR(S): Kusakawa, Tsutomu; Ito, Yoshiyuki
PATENT ASSIGNEE(S): Itoh Oil Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 60177013 | A | 19850911 | JP 1984-32980 | 19840222 |
| JP 03070731 | B | 19911108 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-32980 | 19840222 |

AB Polyol compns. for 2-liquid polyurethane coatings are prepared by reaction of 1 mol triglycerides comprising 10-100% natural oils and fats with no OH groups and 0-90% castor oil, 0.1-2 mol alcs. containing tertiary N, and 0-1.9 mol low-mol.-weight polyols. The sum of the last 2 components are <2 mols. Thus, castor oil and rape seed oil were heated with Quadrol, then mixed with Takelac U-27 (polyester polyol) and Coronate L, and cured to form a coating.

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| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 69.76 | 71.02 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | -9.60 | -9.60 |

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FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
L1 0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2 240 S POLYOL (L) TRIGLYCERIDE
L3 45 S L2 AND POLYURETHANE
L4 4 S L3 AND SEED
L5 41 S L3 NOT L4
L6 3 S L5 AND DIOL
L7 38 S L5 NOT L6
L8 1 S L7 AND TRIOL
L9 3 S L3 AND HYDROFORMYLATION
L10 4 S L4 NOT L9

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| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 0.12 | 71.14 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | 0.00 | -9.60 |

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FILE LAST UPDATED: 28 Jan 2008 (20080128/ED)

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FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008

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L1            0 S POLYOL (L) DIOL (L) TRIOIL (L) TRIGLYCERIDES
L2          240 S POLYOL (L) TRIGLYCERIDE
L3           45 S L2 AND POLYURETHANE
L4            4 S L3 AND SEED
L5           41 S L3 NOT L4
L6            3 S L5 AND DIOL
L7           38 S L5 NOT L6
L8            1 S L7 AND TRIOL
L9            3 S  L3 AND HYDROFORMYLATION
L10           4 S L4 NOT L9

     FILE 'STNGUIDE' ENTERED AT 09:12:54 ON 29 JAN 2008

     FILE 'CAPLUS' ENTERED AT 09:13:58 ON 29 JAN 2008

=> s l2 and hydroformylation
          7521 HYDROFORMYLATION
           113 HYDROFORMYLATIONS
          7538 HYDROFORMYLATION
                 (HYDROFORMYLATION OR HYDROFORMYLATIONS)
L11           3 L2 AND HYDROFORMYLATION

=> s l11 not l6
L12           3 L11 NOT L6

=> d l12 1-3 ibib abs

L12  ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2002:865501  CAPLUS
DOCUMENT NUMBER:          138:205447
TITLE:                    Polyols and Polyurethanes from
                          Hydroformylation of Soybean Oil
AUTHOR(S):                Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic,
                          Zoran S.
CORPORATE SOURCE:         Kansas Polymer Research Center, Business and
                          Technology Institute, Pittsburg, KS, 66762-7560, USA
SOURCE:                   Journal of Polymers and the Environment (2002),
                          10(1/2), 49-52
                          CODEN: JPENFW; ISSN: 1566-2543
PUBLISHER:                Kluwer Academic/Plenum Publishers
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   This paper compares phys. and mech. properties of polyurethanes derived
     via the hydroformylation approach and is a part of our study on
     the structure-property relationships in polyurethanes created from
     vegetable oils.  The double bonds of soybean oil are first converted to
     aldehydes through hydroformylation using either rhodium or
     cobalt as the catalyst.  The aldehydes are hydrogenated by Raney nickel to
     alcs., forming a triglyceride polyol.  The latter is
     reacted with polymeric MDI to yield the polyurethane.  Depending on the
     degree of conversion, the materials can behave as hard rubbers or rigid
     plastics.  The rhodium-catalyzed reaction afforded a polyol with
     a 95% conversion, giving rise to a rigid polyurethane, while the
     cobalt-catalyzed reaction gives a polyol with a 67% conversion,
     leading to a hard rubber having lower mech. strengths.  Addition of glycerin
     as a cross-linker systematically improves the properties of the
     polyurethanes.  The polyols are characterized by DSC.  The
     measured properties of polyurethanes include glass transition temps.,
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tensile strengths, flexural moduli, and impact strengths.
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:232425 CAPLUS
DOCUMENT NUMBER: 136:386771
TITLE: Polyurethanes based on hydroformylated soybean oil
AUTHOR(S): Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic, Zoran S.
CORPORATE SOURCE: Kansas Polymer Research Center, Pittsburg State University, Pittsburg, KS, 66762, USA
SOURCE: PMSE Preprints (2002), 86, 385-386
CODEN: PPMRA9; ISSN: 1550-6703
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
AB We were investigating the structure-property relationships of polyurethanes derived from vegetable oils. The double bonds of a vegetable oil is first converted to aldehydes through hydroformylation using either rhodium or cobalt as the catalyst. The aldehydes are hydrogenated by Raney nickel to alcs. therefore a triglyceride polyol is formed. The latter is reacted with an isocyanate to yield a polyurethane. Depending on the degree of conversion, the materials can behave as a soft rubber or a rigid plastic. The rhodium catalyzed reaction afforded a polyol with a >90% conversion, therefore the polyurethane is rigid and has higher moduli. While cobalt gives a soft polymer having low mech. strength.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:191841 CAPLUS
TITLE: Polyurethanes based on hydroformylated soybean oil
AUTHOR(S): Guo, Andrew; Demydov, Dima; Zhang, Wei; Petrovic, Zoran S.
CORPORATE SOURCE: Kansas Polymer Research Center, Pittsburg State University, Pittsburg, KS, 66762, USA
SOURCE: Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), PMSE-257. American Chemical Society: Washington, D. C.
CODEN: 69CKQP
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB As the oil crisis and global warming deepen, biobased materials have received considerable attention, recently and beyond. Both agriculture and industry will benefit from the use of such materials from renewable resources. At the Kansas Polymer Research Center, we have been investigating the structure-property relationships of polyurethanes derived from vegetable oils. The double bonds of a vegetable oil is first converted to aldehydes through hydroformylation using either rhodium or cobalt as the catalyst. The aldehydes are hydrogenated by Raney nickel to alcs. therefore a triglyceride polyol is formed. The latter is reacted with an isocyanate to yield a polyurethane. Depending on the degree of conversion, the materials can behave as a soft rubber or a rigid plastic. The rhodium catalyzed reaction afforded a polyol with a >90% conversion, therefore the

polyurethane is rigid and has higher moduli. While cobalt gives a soft polymer having low mech. strength.

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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    13.25      84.39

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -2.40     -12.00

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FULL ESTIMATED COST                                     0.06      84.45

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                     0.00     -12.00

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     FILE 'CAPLUS' ENTERED AT 08:58:25 ON 29 JAN 2008
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L9            3 S  L3 AND HYDROFORMYLATION
L10           4 S L4 NOT L9

     FILE 'STNGUIDE' ENTERED AT 09:12:54 ON 29 JAN 2008

     FILE 'CAPLUS' ENTERED AT 09:13:58 ON 29 JAN 2008
L11           3 S L2 AND HYDROFORMYLATION
L12           3 S L11 NOT L6

     FILE 'STNGUIDE' ENTERED AT 09:17:07 ON 29 JAN 2008

     FILE 'CAPLUS' ENTERED AT 09:17:27 ON 29 JAN 2008
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